

FIG. 1

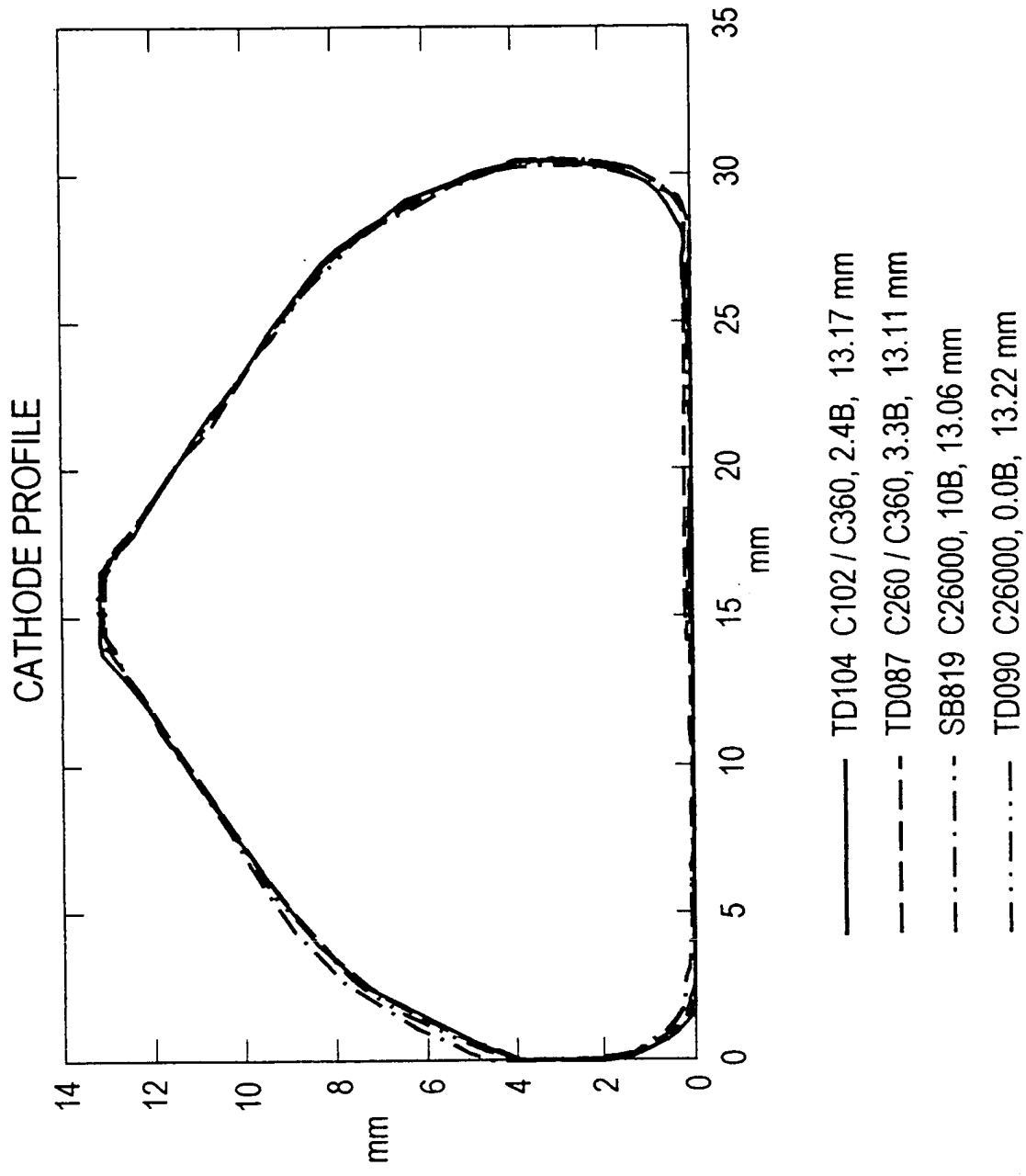
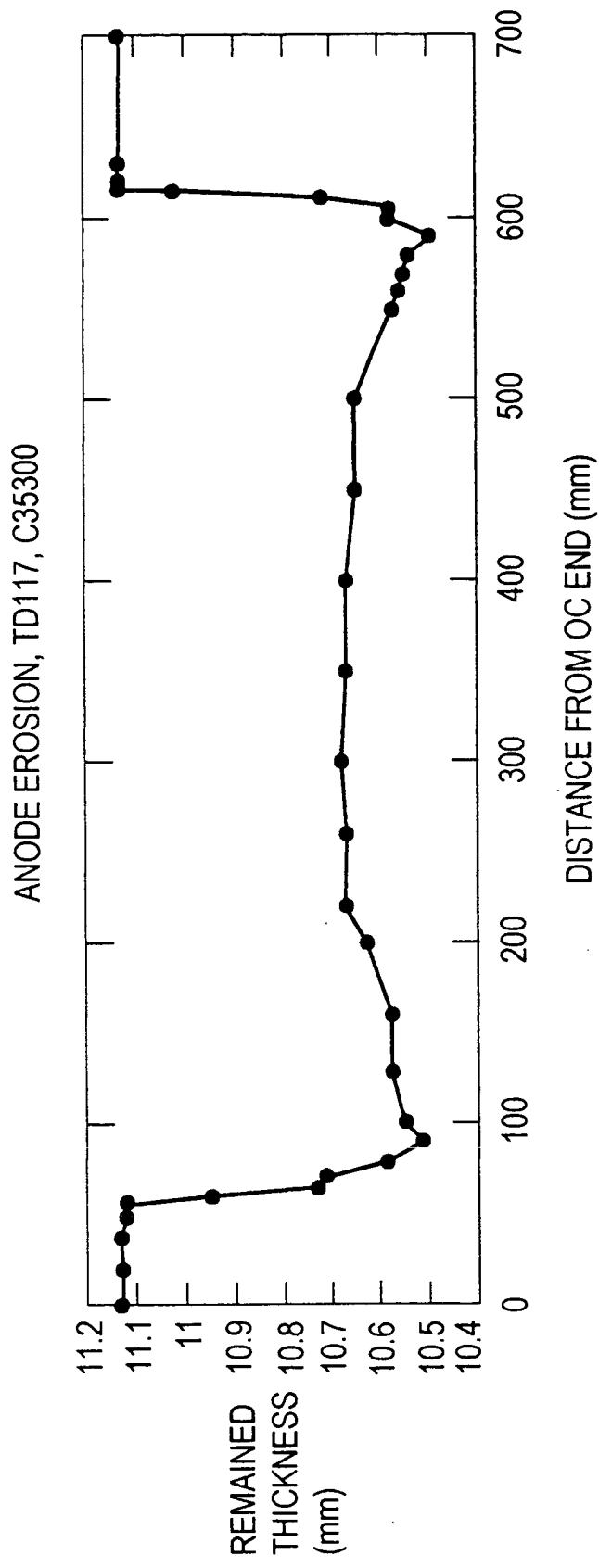


FIG. 2. Cathode Profile Changes



Typical Axial Anode Erosion Profile, 3 Bp in 4 KHz ArF

FIG. 3

FIG. 6. LOCAL C26000 ANODE AND CATHODE SEGMENT CORROSION RATES (mm/Bp)
 TD133 SEGMENTED CATHODE TEST, 2.3 Bp, 2.5 KHz, ArF, 1100V

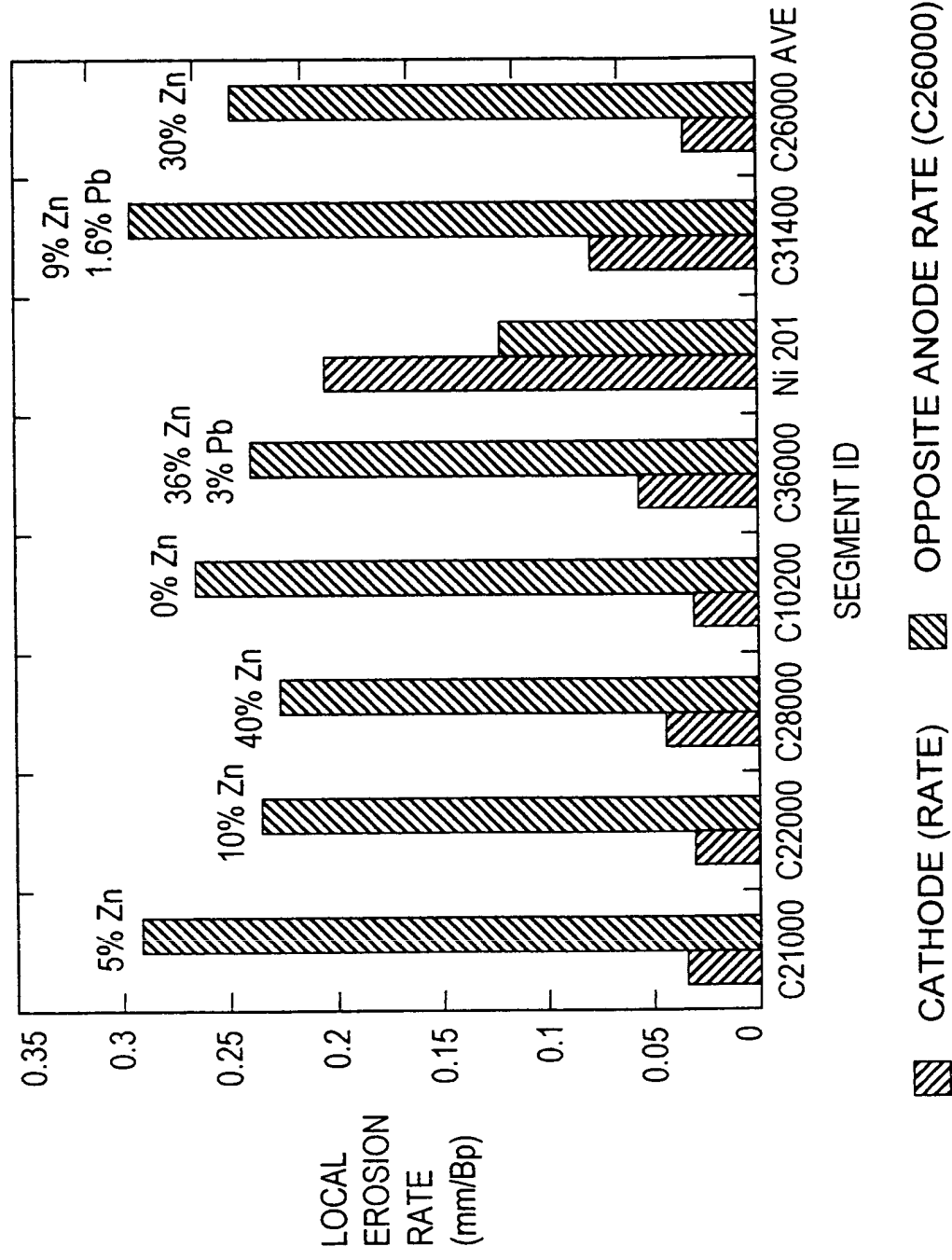


FIG. 4

Fig. 7. Cathode Discharge Width vs Material Type
(TD133, 2.5 KHz ArF, 1100 Volts, 2.3 Bp)

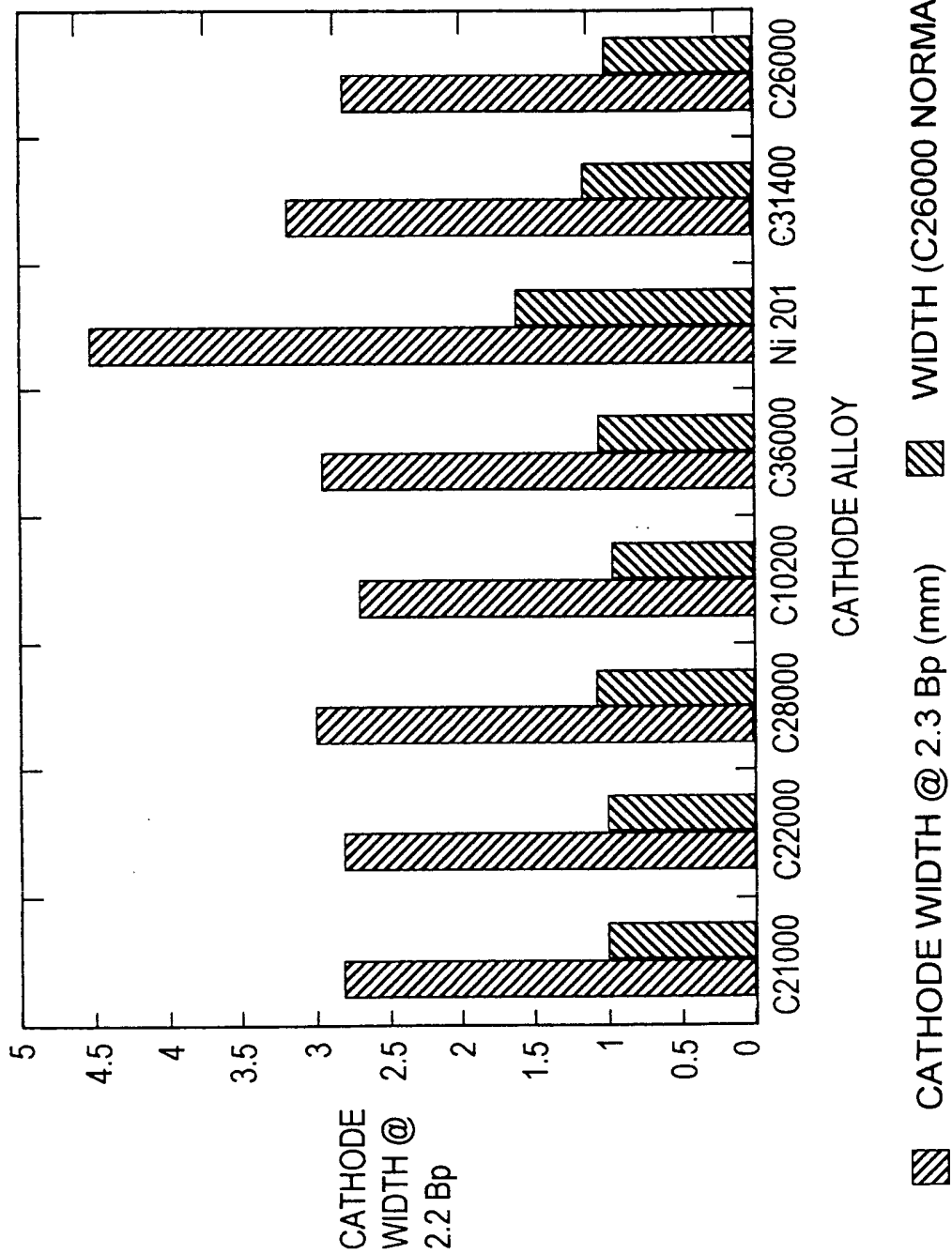


FIG. 5

Fig. 8. Surface Roughness Vs. Alloy Type C26000
 Measured by "Pocket Surf", TD133 6410A, 2.5 KHz ArF, 2.3 Bp

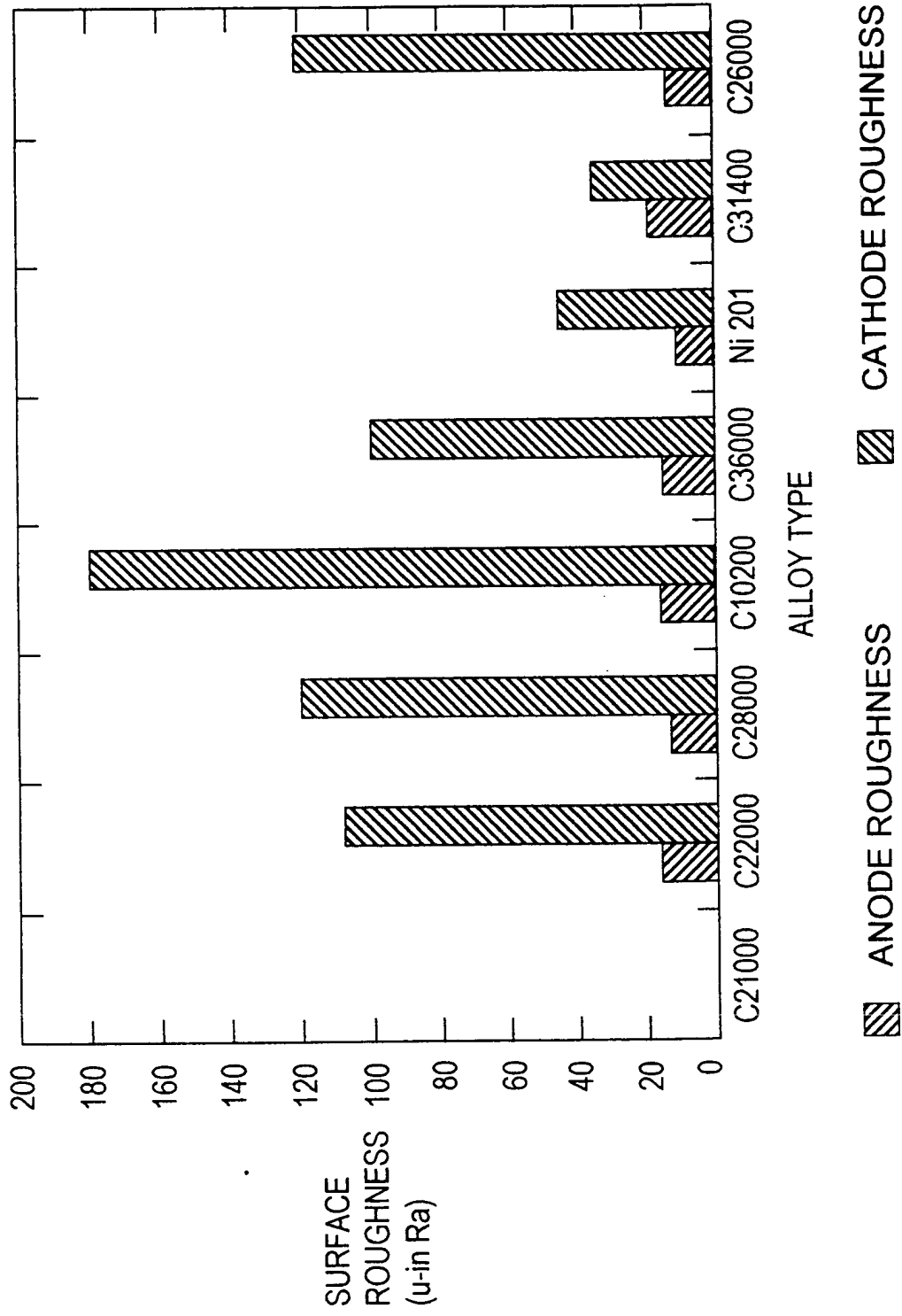


FIG. 6

Fig. 10. Average Cathode Erosion Rates (2KHz, >2Bp)

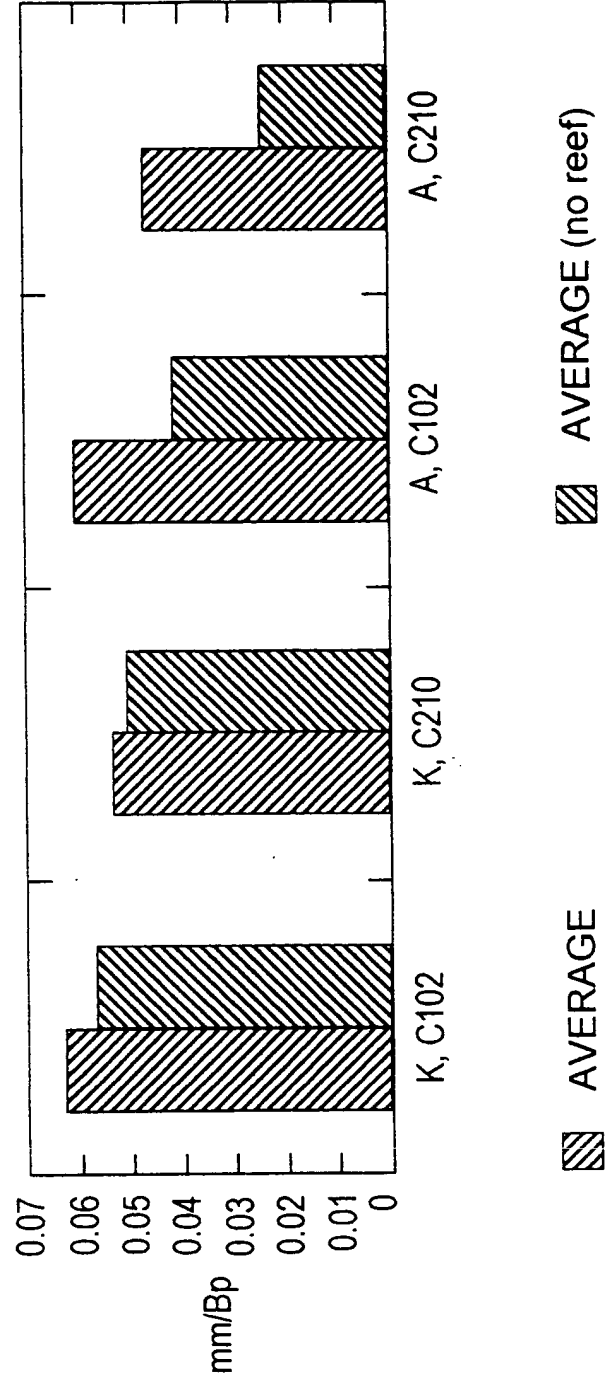


FIG. 7

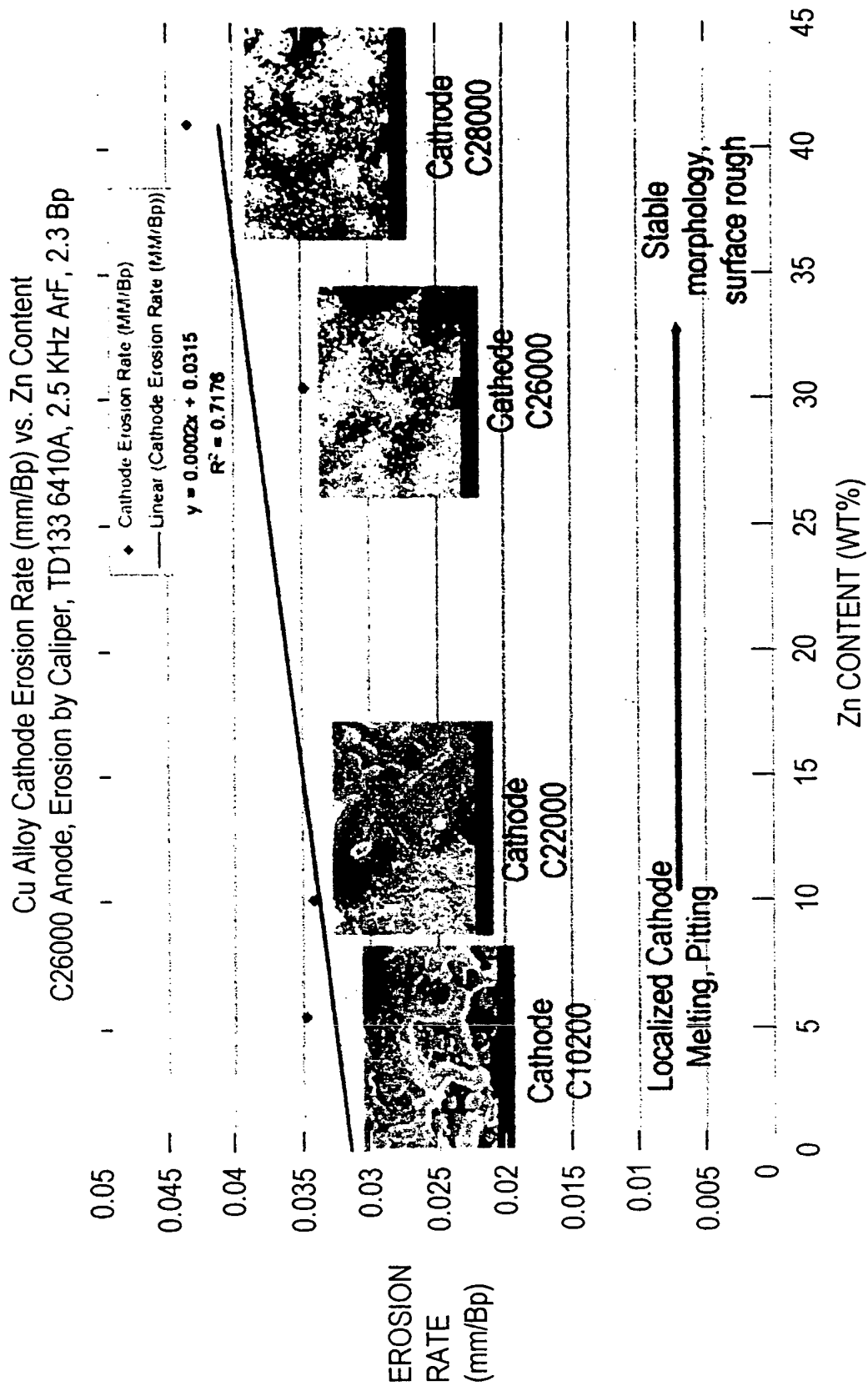
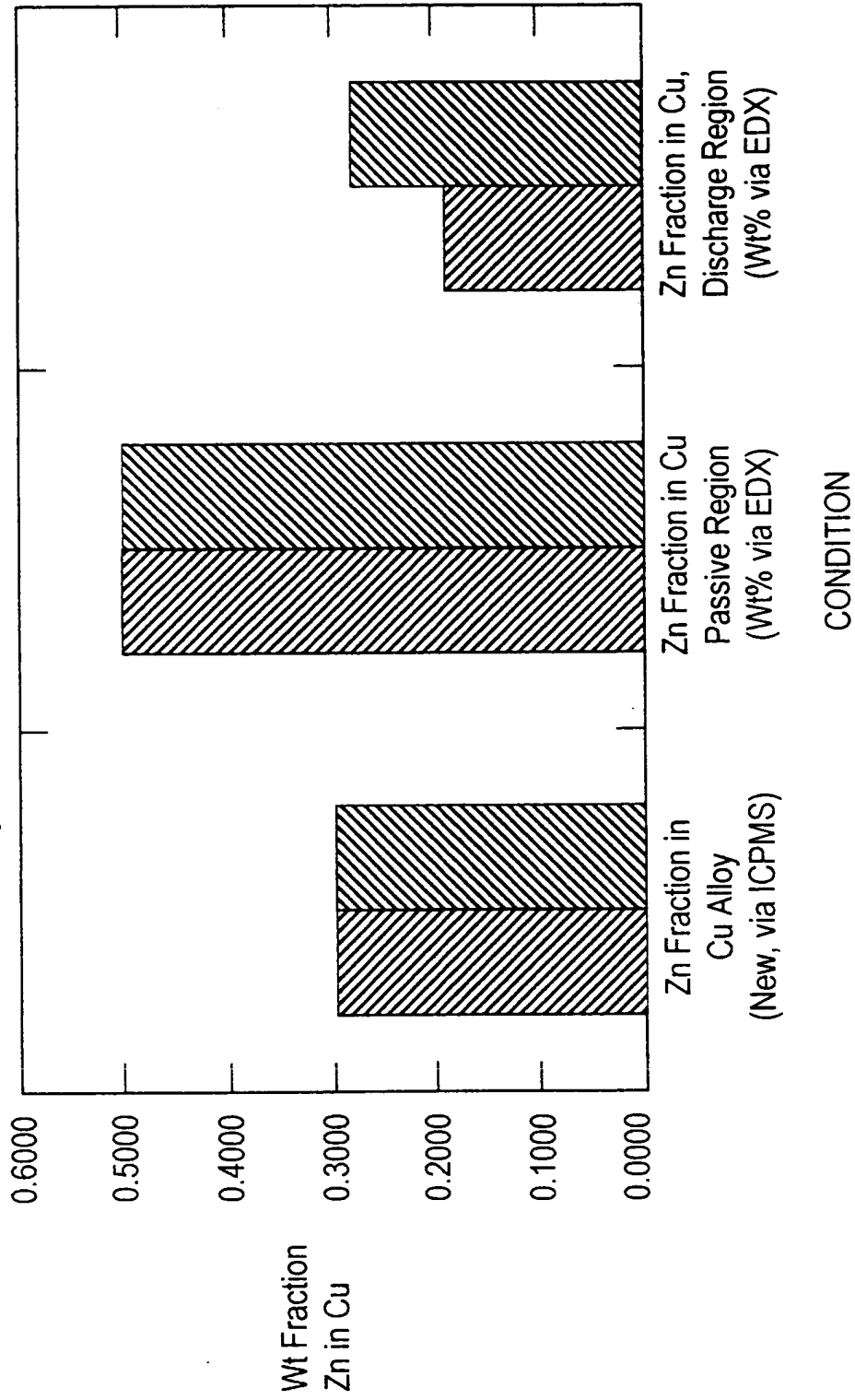


FIG. 8

Fig. 8. Surface Roughness Vs. Alloy Type C26000
 Measured by "Pocket Surf", TD133 6410A, 2.5 KHz ArF, 2.3 Bp



 C26000 CATHODE
  C26000 ANODE

FIG. 9

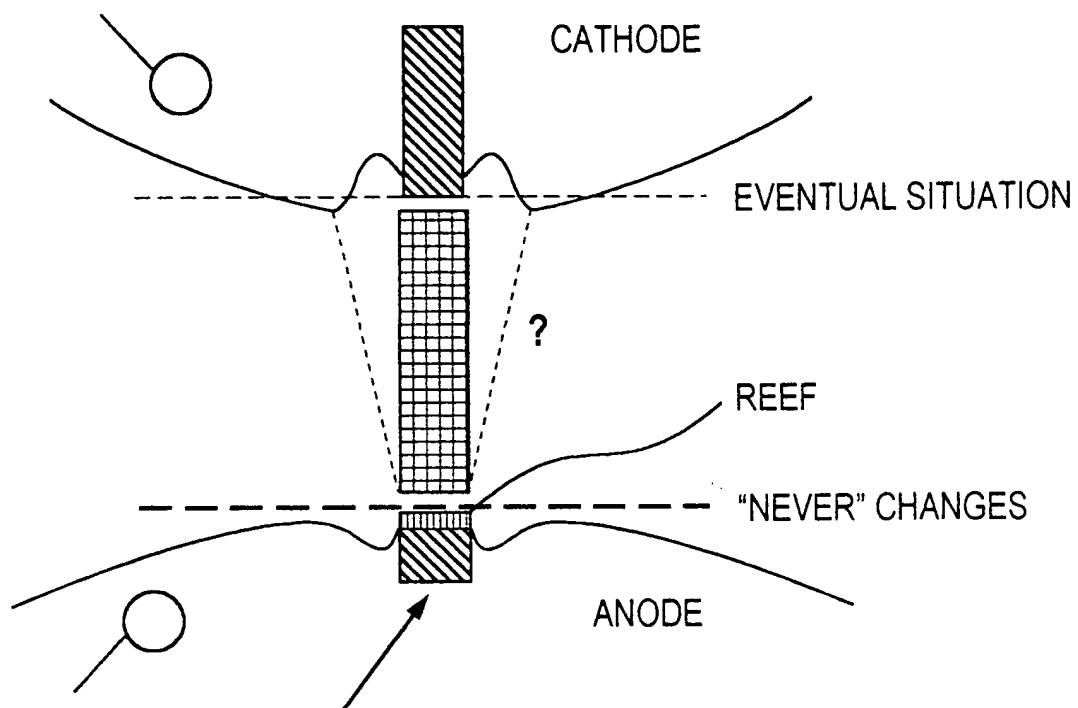


FIG. 10

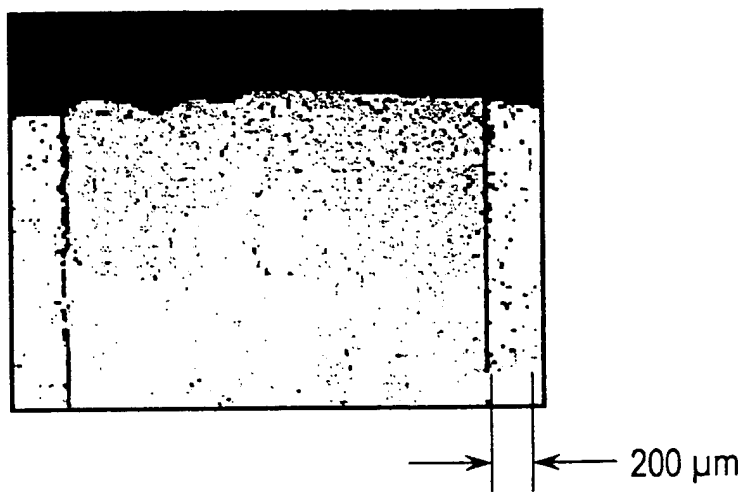


FIG. 11

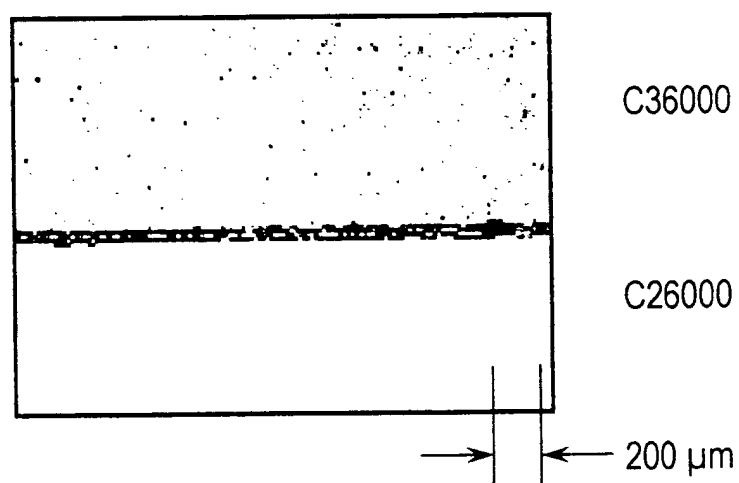


FIG. 12

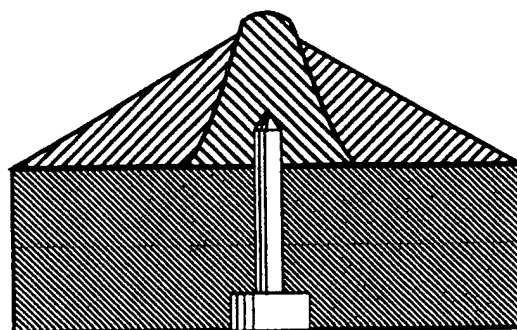


FIG. 13

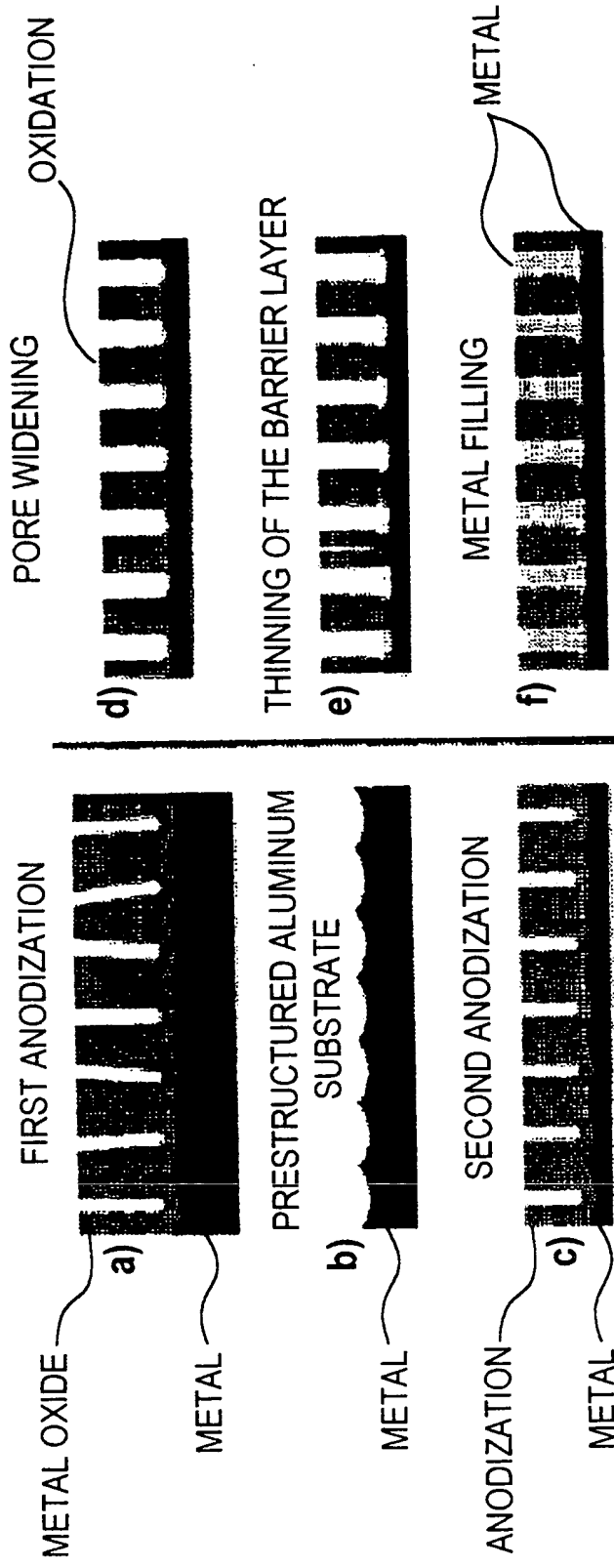


FIG. 14

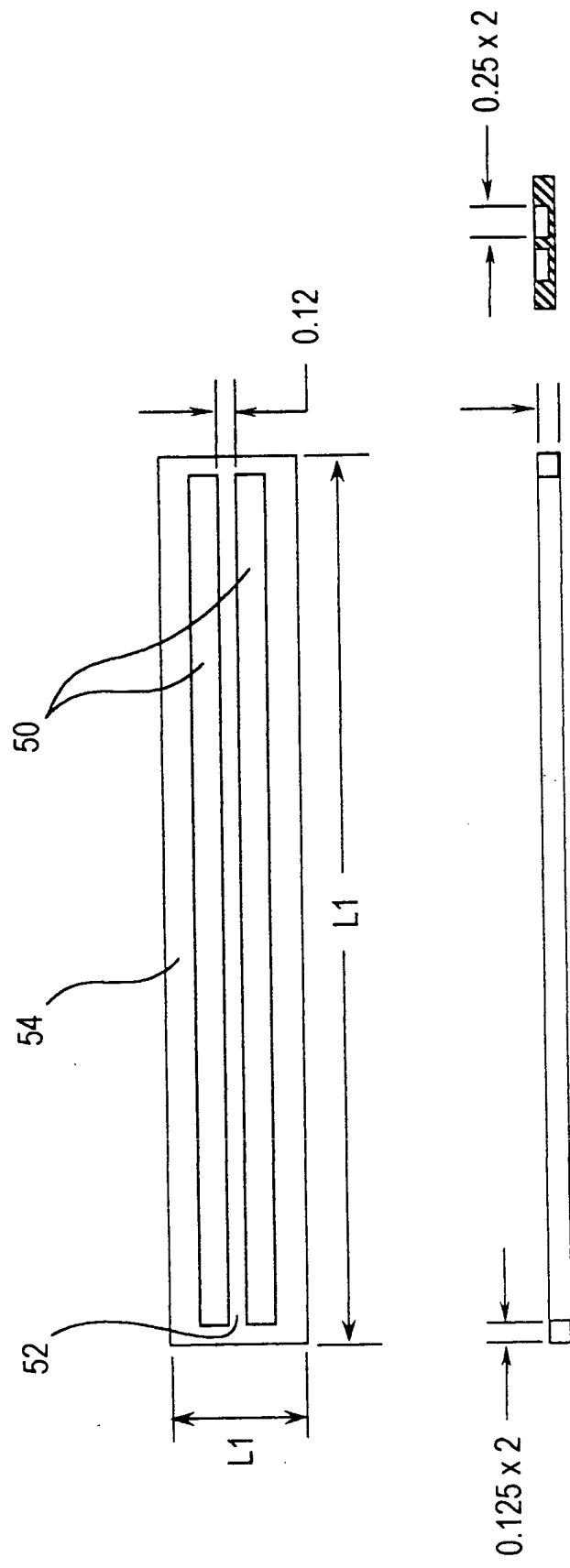


FIG. 15

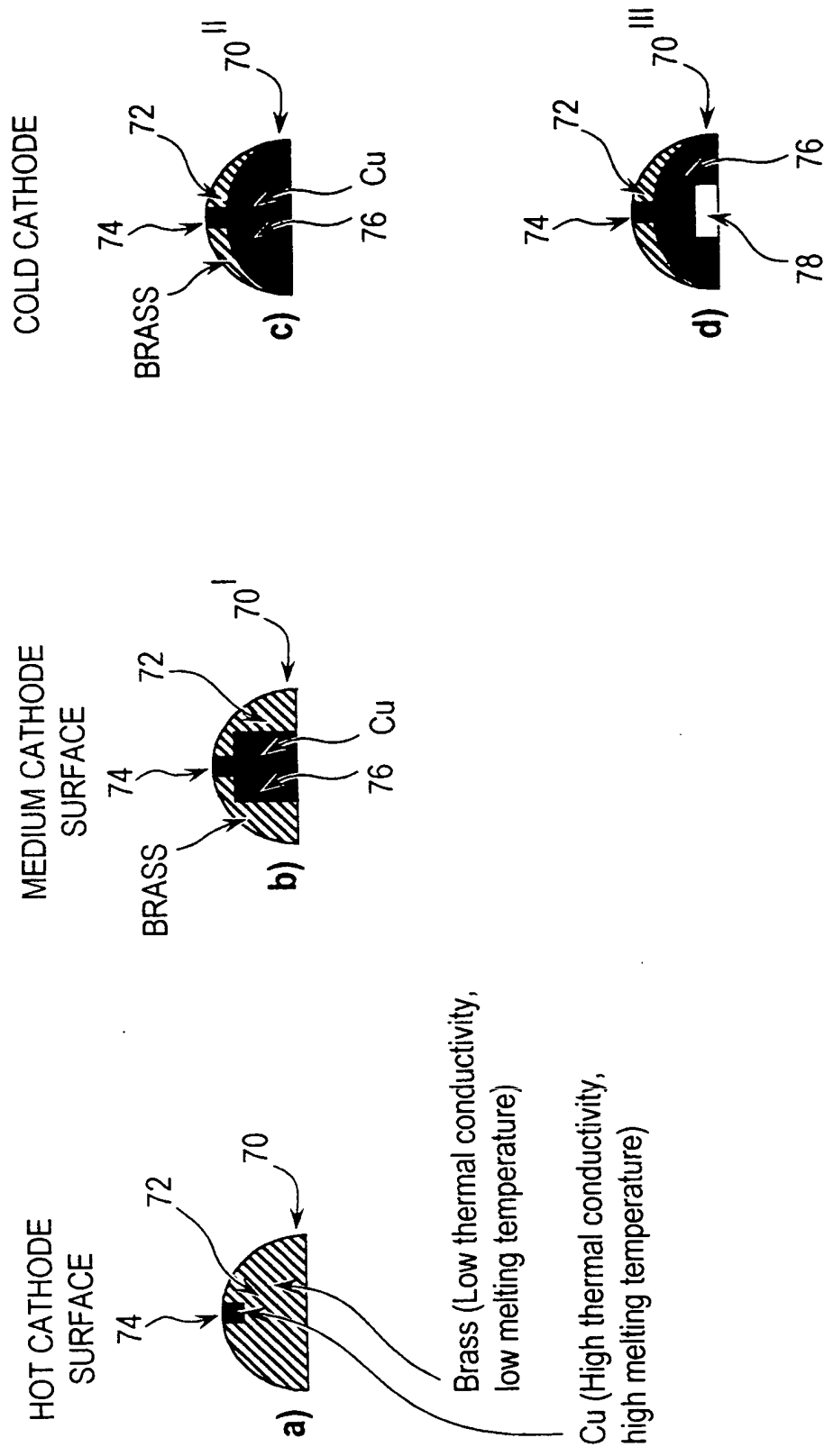


FIGURE 1. Cathode or Anode Surface Temperature Control Using Diffusion Bonding Technology.

FIG. 16

AIRSTREAM CONCEPT

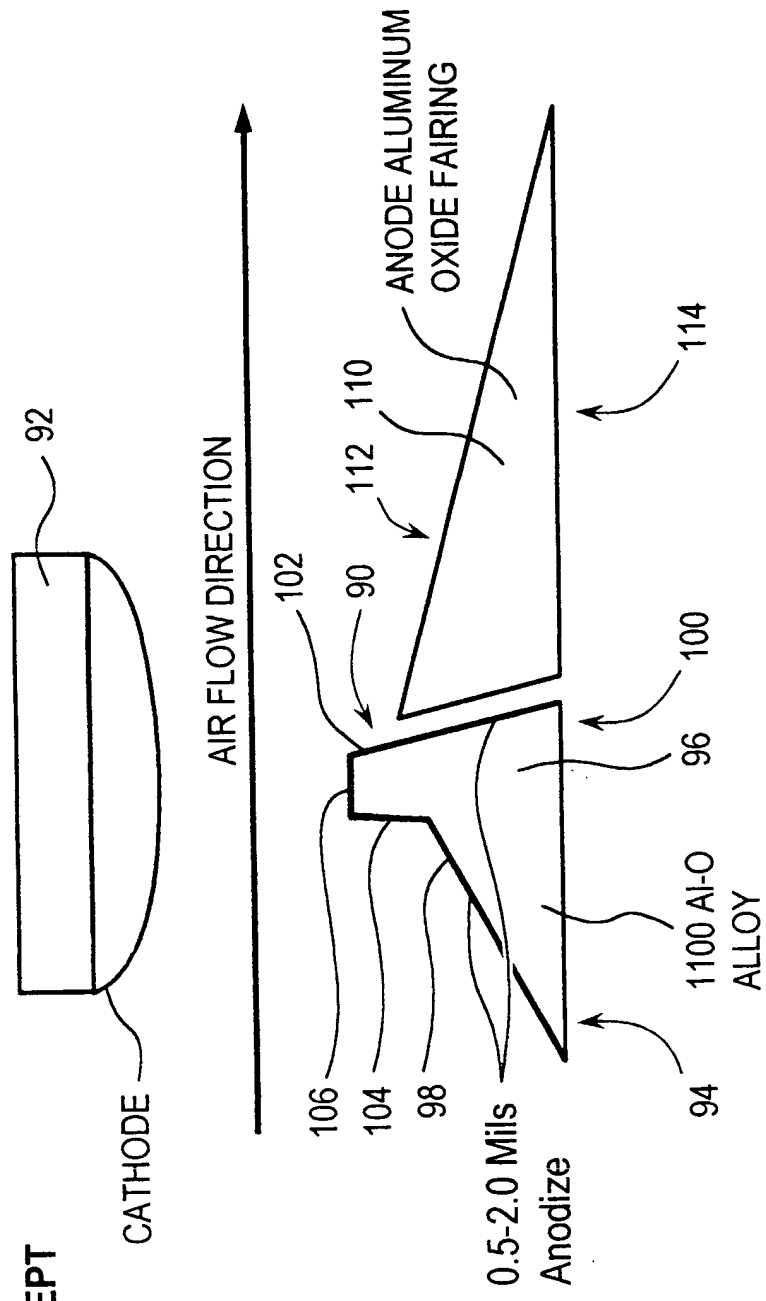
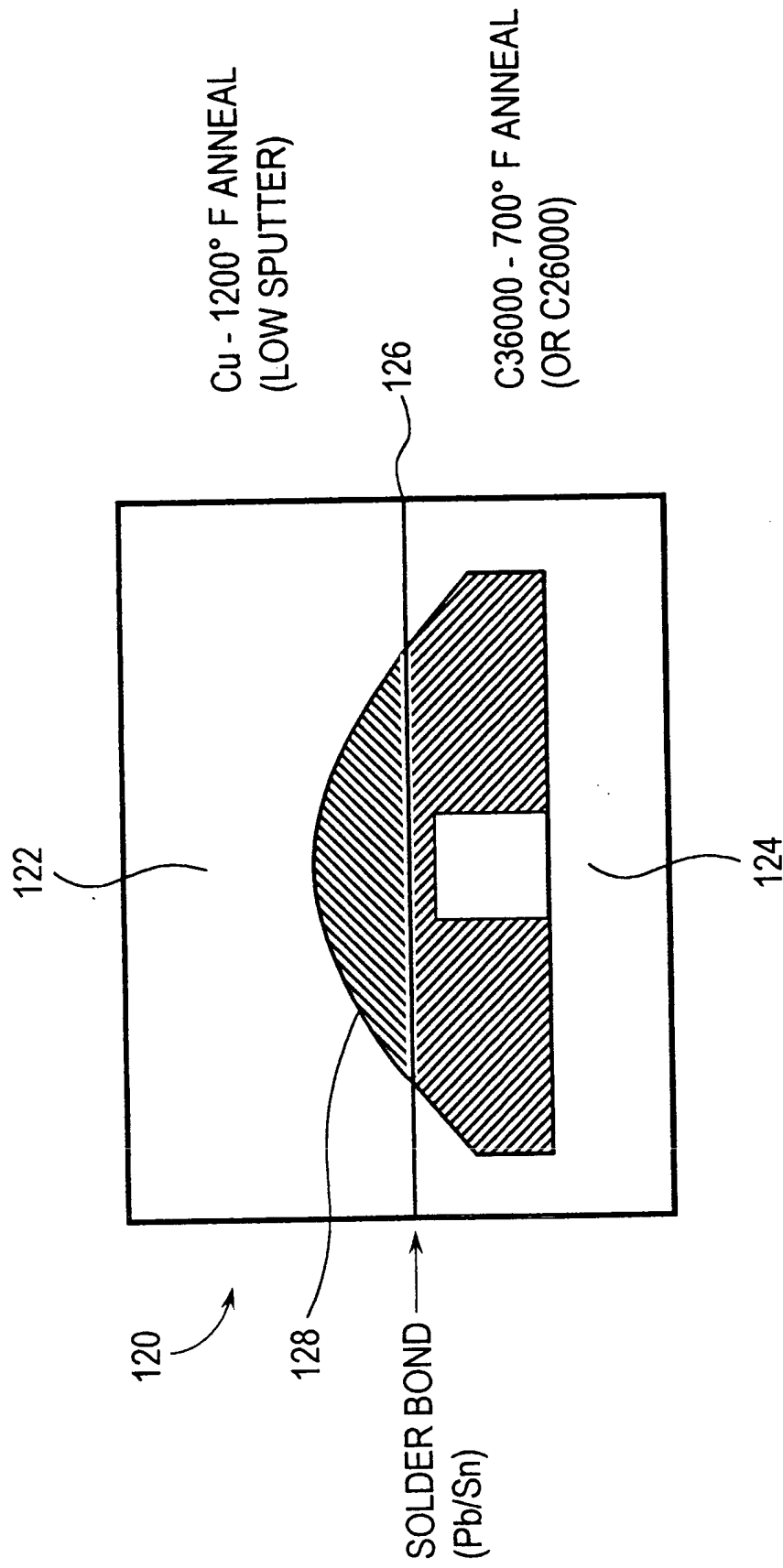


FIG. 17

Spatter rate of annealed Cu about $\frac{1}{2}$ that of brass.



Good machining and mechanical properties for mounting and gas sealing.
(Low erosion rate cathode not relying on differential erosion.)

FIG. 18

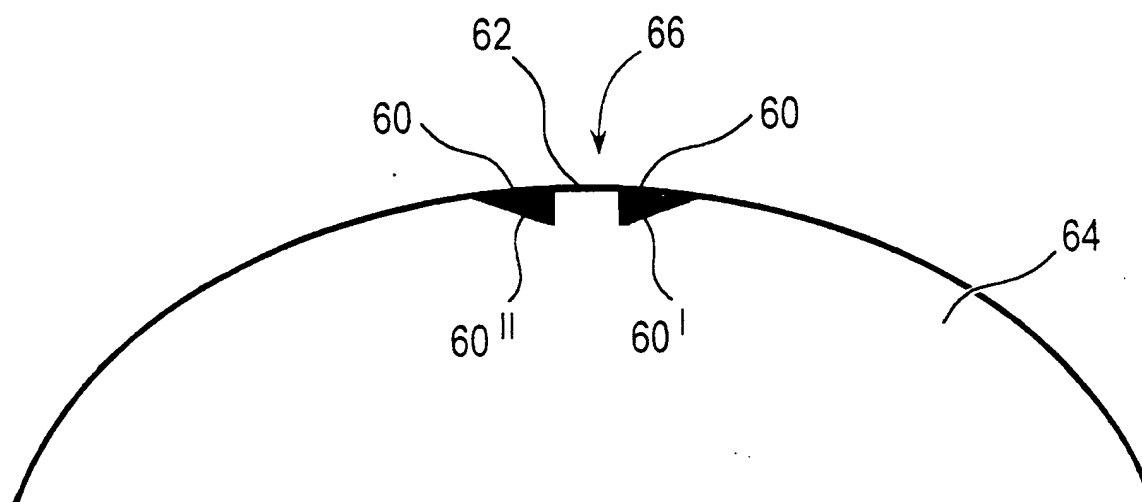


FIG. 19

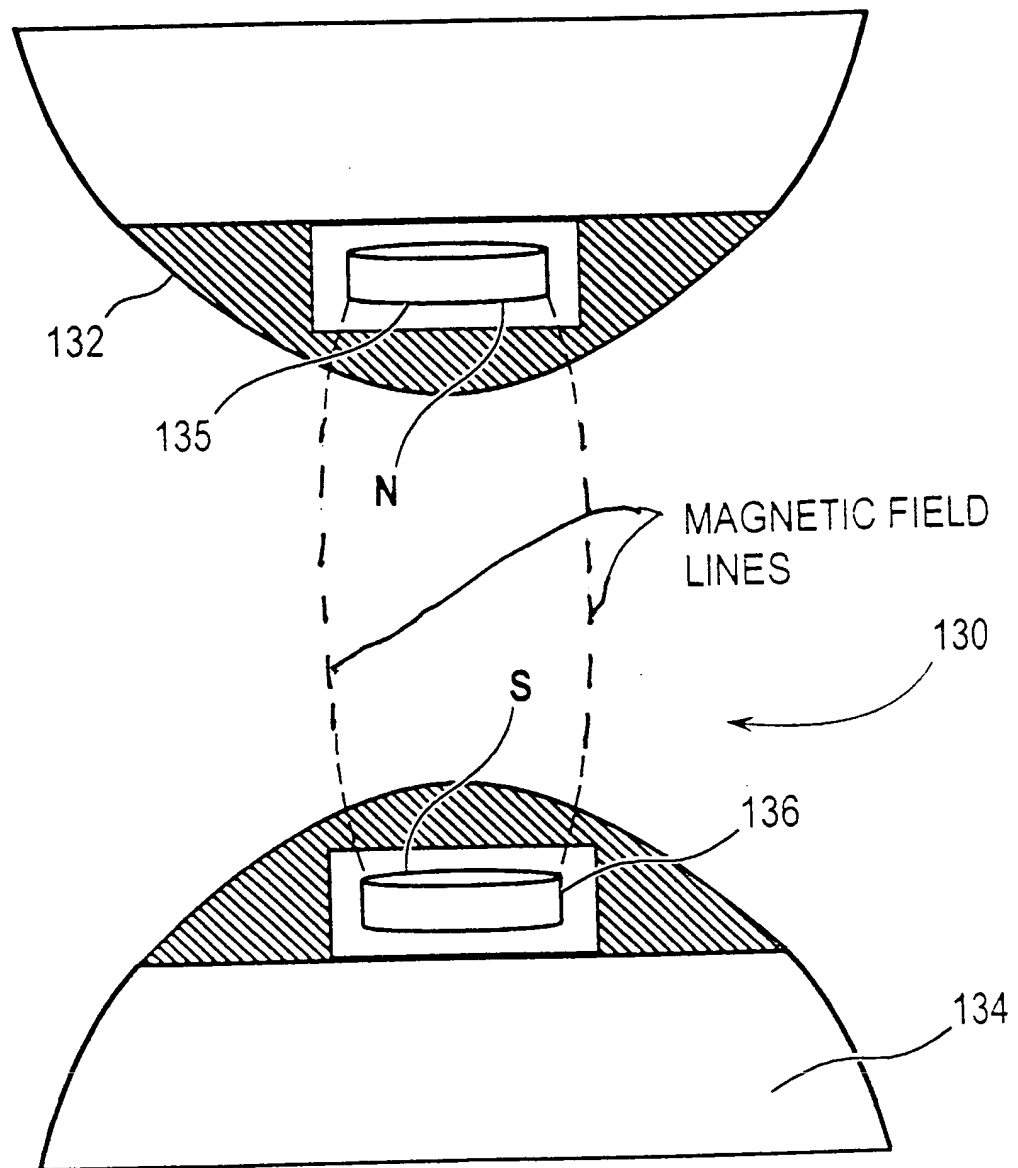


FIG. 20a

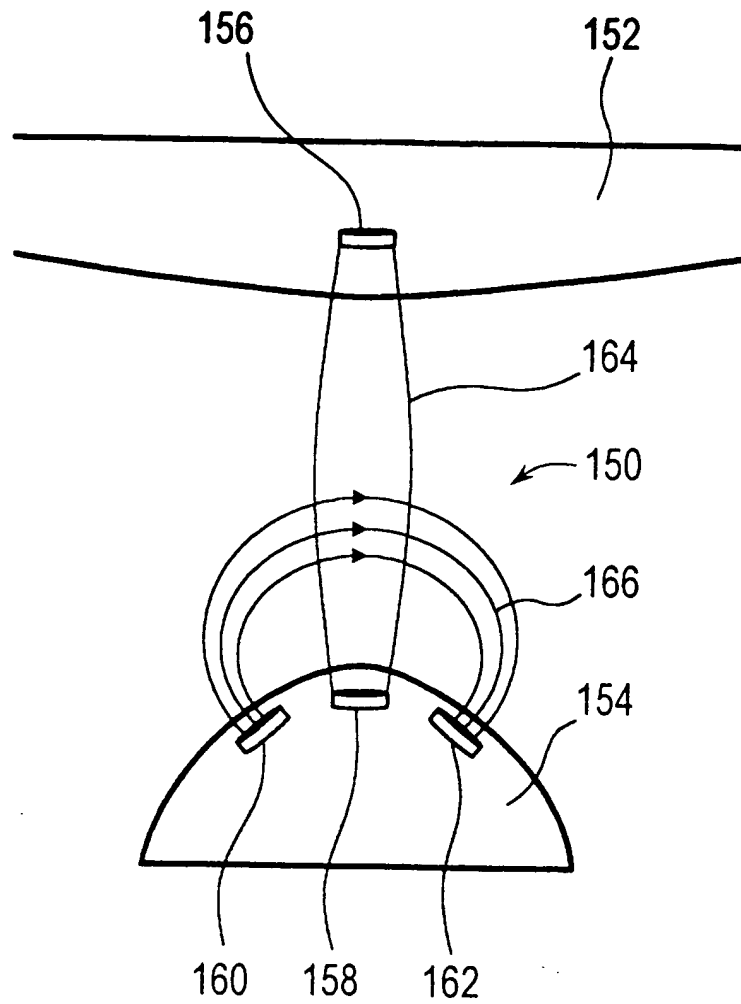


FIG. 20b

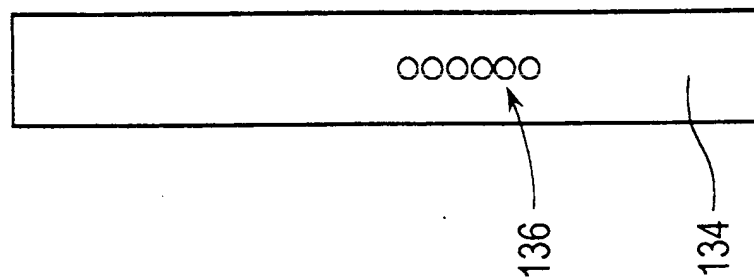


FIG. 20c

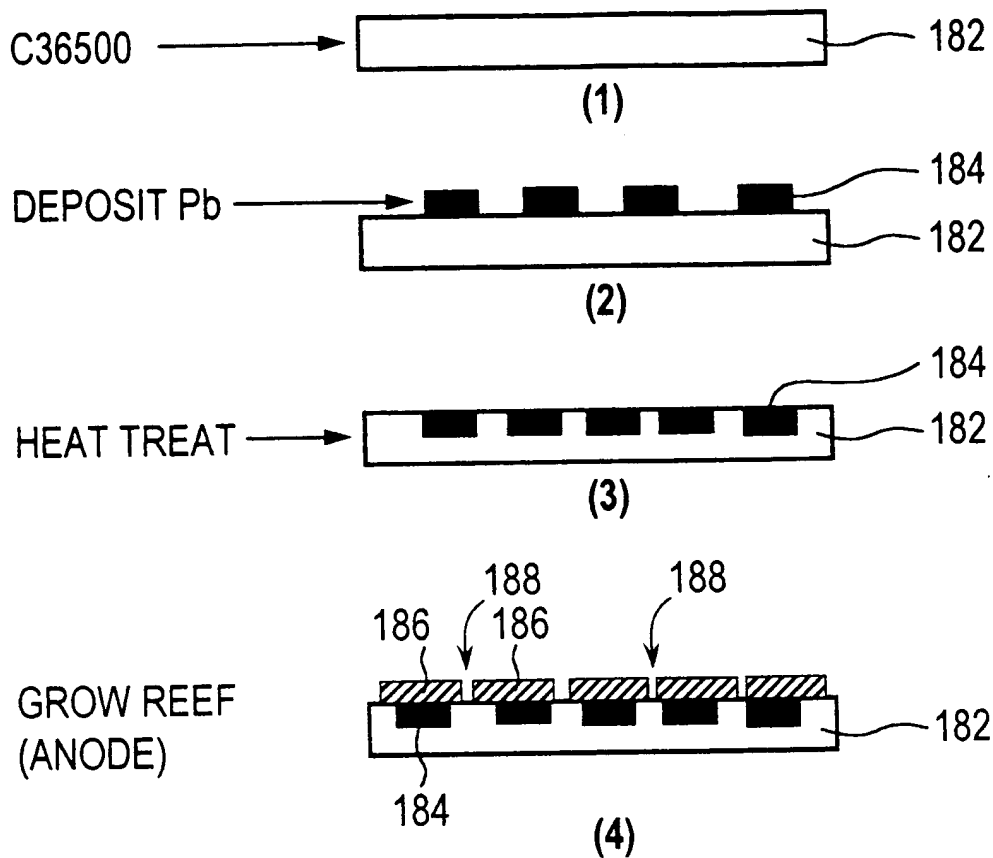


FIG. 21a

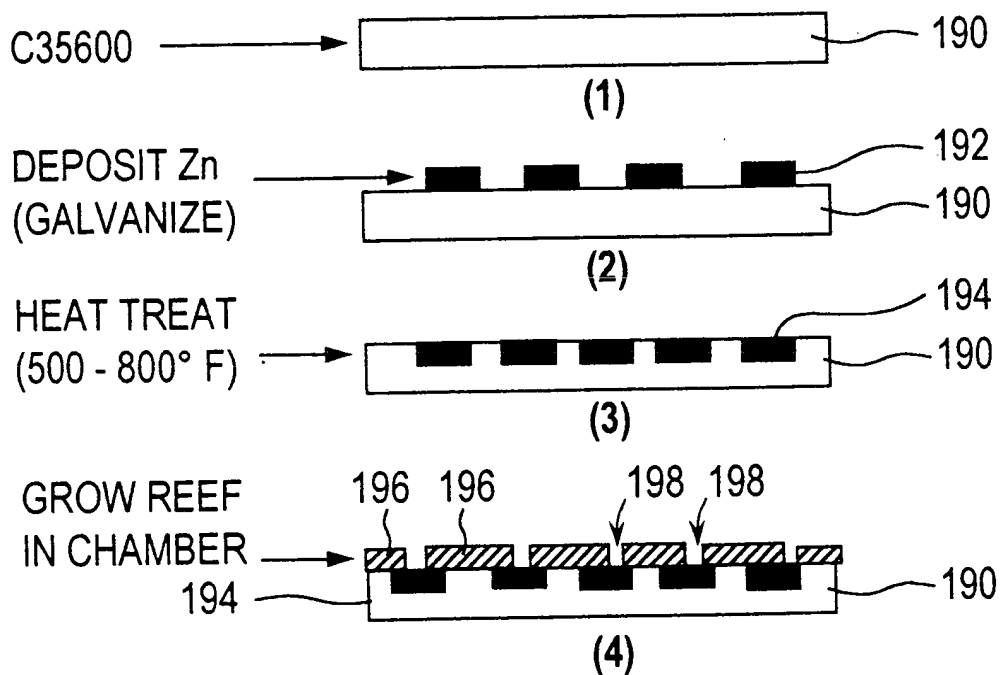


FIG. 21b

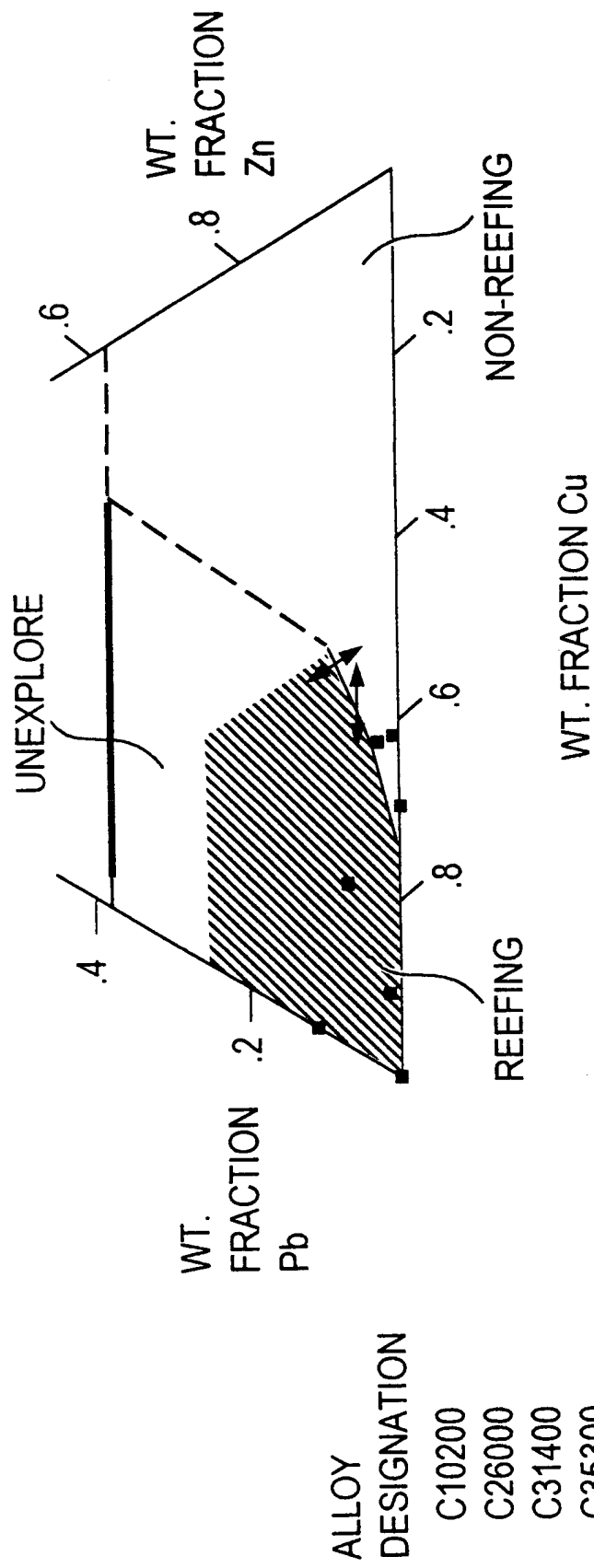


FIG. 22

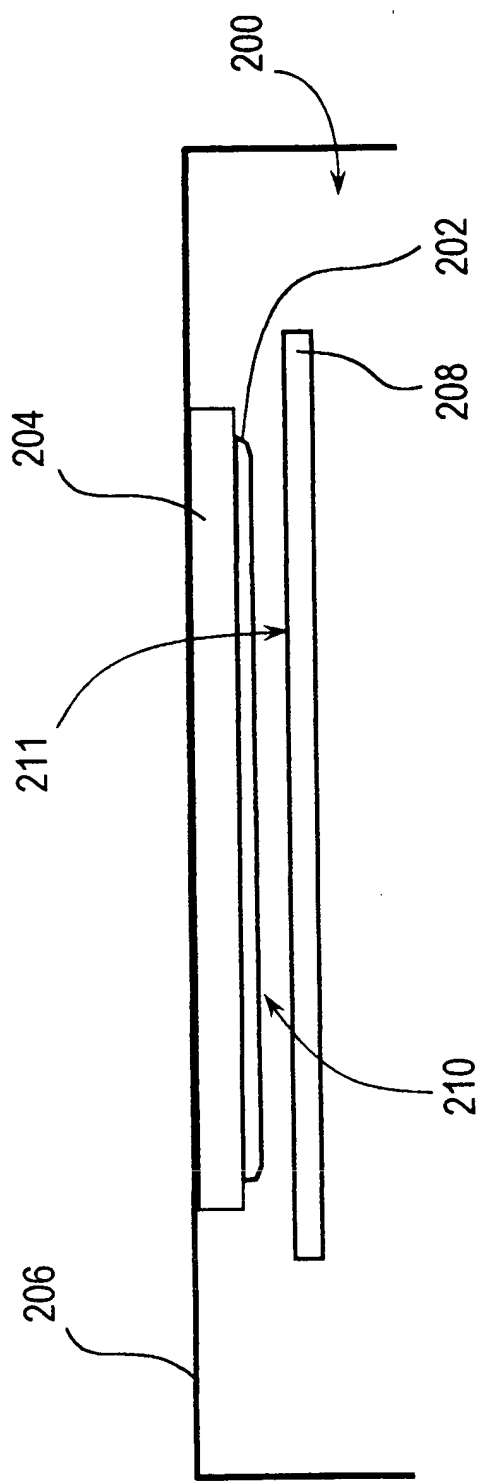


FIG. 23a

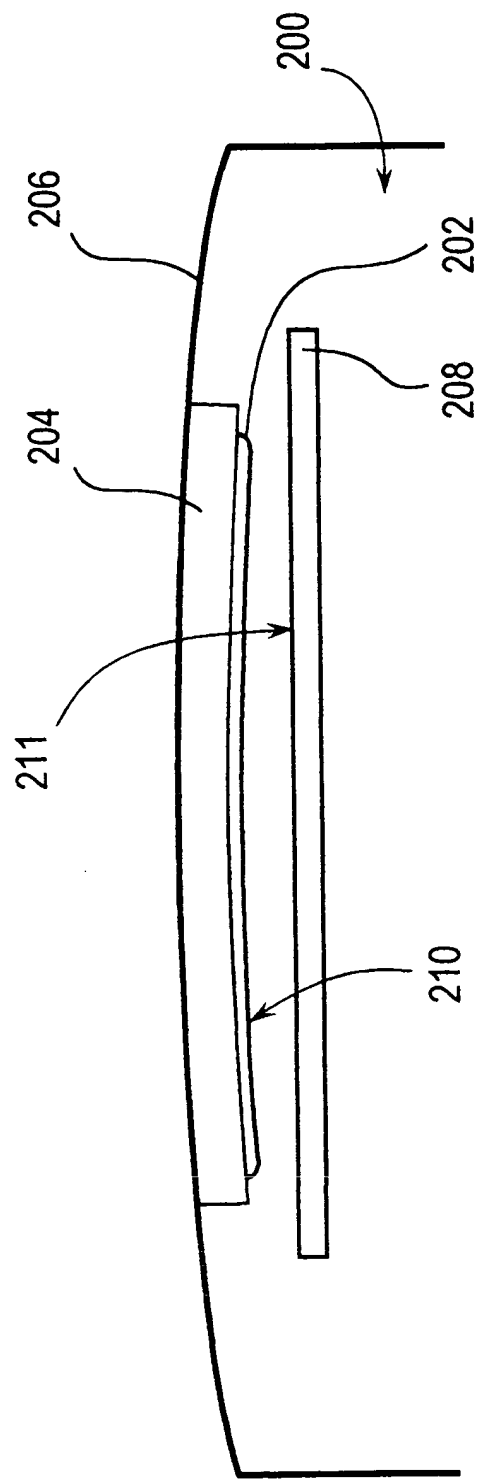


FIG. 23b

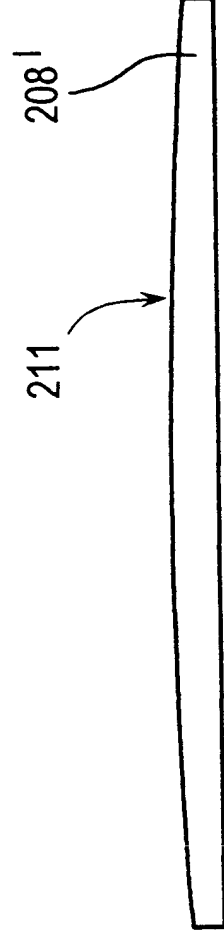


FIG. 23c

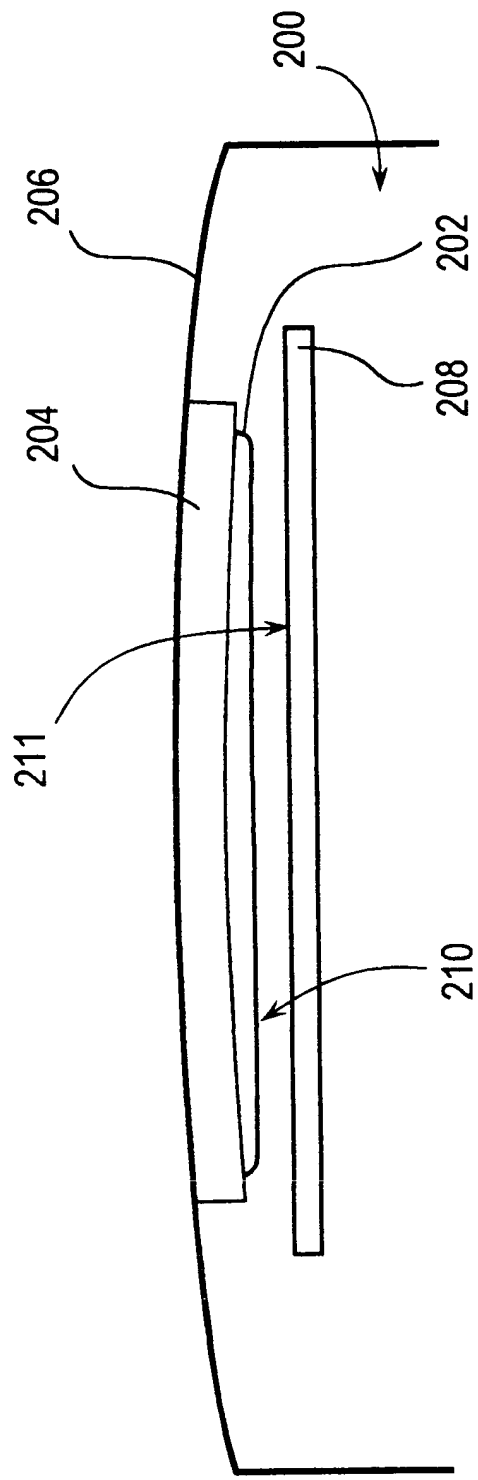
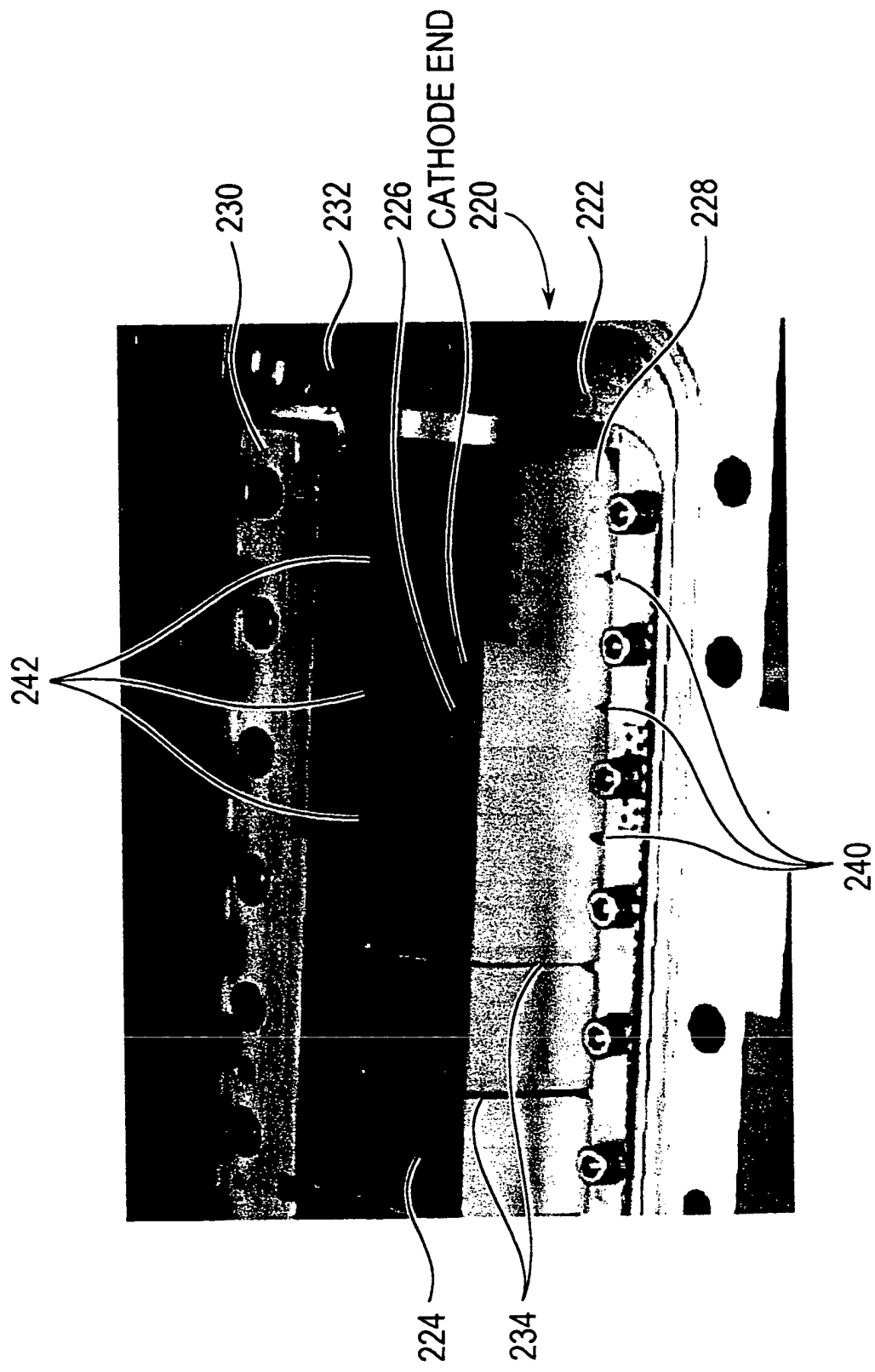


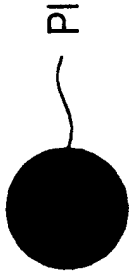
FIG. 23d



Current return tangs removed to increase inductance at end of discharge region.

FIG. 24

ANODE SLOPE



PI

(KrF, dual brass, ~ 7Bshots, C36 center, C26 body)

(Taken in non-reefed region)

~4.5 DEGREES



FIG. 25a

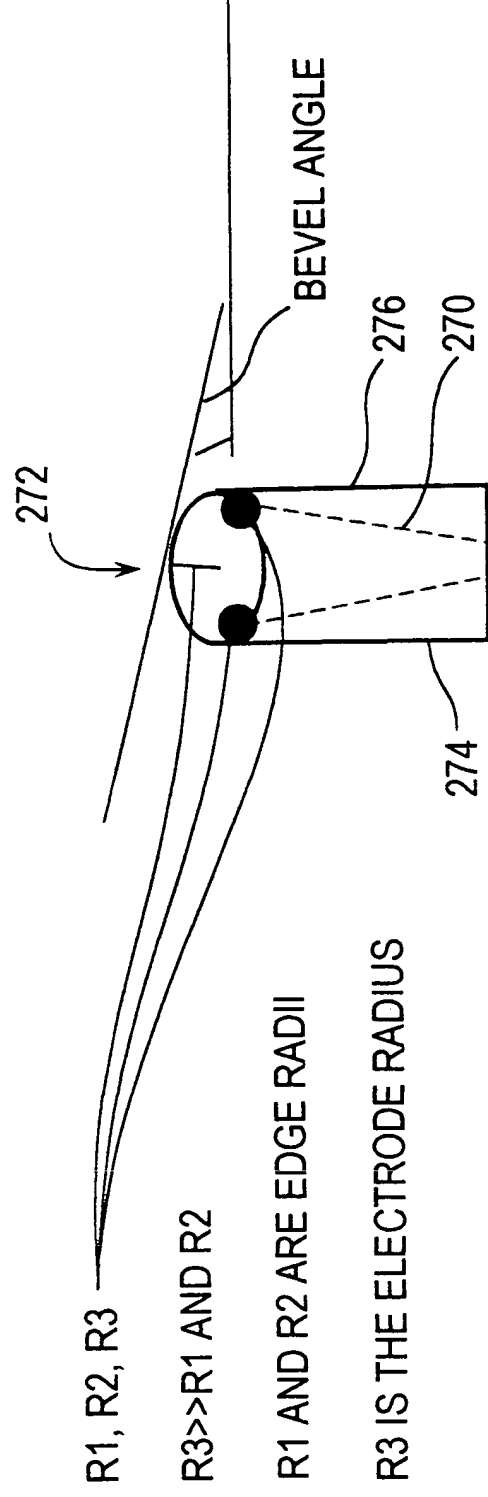


FIG. 25b